



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Pat nt and Trademark Offic**

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Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/066,513 04/24/98 REYNOLDS

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IM62/1212

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EXAMINER

NOLAN, S

ART UNIT

PAPER NUMBER

1772

DATE MAILED:

12/12/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trad marks**

# Office Action Summary

Application No.  
09/066,513

Applicant(s)  
REYNOLDS ET AL

Examiner  
Sandra Nolan

Group Art Unit  
1772



☒ Responsive to communication(s) filed on Sept. 26, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

- ☒ Claim(s) 1-23 and 25-28 is/are pending in the application.
- Of the above, claim(s) 18-23 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-17 and 25-28 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### **CLAIMS**

1. Claims 1-23 and 25-28 are pending. Claim 24 was canceled via the amendment dated September 26, 2000 (Paper No. 9).

Claims 1-17 and 25-28 are under consideration, claims 18-23 having been withdrawn as non-elected.

### **REJECTIONS WITHDRAWN**

2 The 35 USC 103 rejection of claims 1-10, 12-17 and 24-28 as unpatentable over Davidson et al (US 5,636,551) in view of Khattab et al (US 4,159,286), as stated in paragraph 4 of the March 16, 2000 Office Action (Paper No. 7) is withdrawn in view of Applicants' amendments in Paper No. 9.

3. The 35 USC 103 rejection of claim 11 as being unpatentable over Davidson et al and Khattab et al, as applied to claims 1-10, 12-17 and 24-28 above, and further in view of Gruel (US 5,922,425), as explained in paragraph 5 of Paper No. 7, is withdrawn in view of Applicants' amendments in Paper No. 9.

### **NEW REJECTIONS**

#### ***Claim Rejections - 35 USC § 103***

W(1) 4. Claims 1-17 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederiksen (CA 1,254,110) in view of Giatras et al (US 4,362,069) and Greuel (US 5,922,425).

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Frederiksen shows conduits for motion-transmitting cables in his figure. The conduit depicted has a liner **24** within which a cable moves freely (page 9, lines 33+). The outer sheath of the conduit **30** is made of plastic (page 13, lines 22+). He does not teach that the **30** is made of polytetrafluoroethylene (PTFE).

Giatras et al show inner liners for push-pull cable assemblies (abstract). The liners contain PTFE (col. 3, line 58 and col. 5, line 43) and polyphenylene sulfide (PPS) filler (col. 3, lines 50-51 and col. 5, lines 45-46).

Greuel teaches PTFE with fluoropolymers in multilayer articles that are useful in making tubing (abstract). Carbon black (col. 6, line 2) is a "carbon powder" filler [per claim 13]. The PTFE polymers are taught to have numerous mechanical applications, including use in tubing (abstract).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the PTFE/PPS combination of Giatras as the liner and the PTFE/carbon black combination of Greuel as the outer sheath in the conduits of Frederiksen.

Motivation to employ the Giatras combination as the inner sheath is found at col. 2, lines 56+ of Giatras et al, where int anti-friction properties of their liners are discussed.

Motivation to use Greuel's combination to make the outer sheath is found at col. 1, 41-50 of Greuel, where the PTFE formulations are said to having wide mechanical utility.

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RESPONSE TO ARGUMENTS


5. Applicant's arguments with respect to claims 1-17 and 24-28 have been considered but are moot in view of the new ground(s) of rejection.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra M. Nolan, whose telephone number is (703) 308-9545. The examiner can normally be reached on Monday through Thursday from 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ellis P. Robinson, can be reached on (703) 308-2364. The fax phone number for the organization where this application is assigned is (703) 305-5408.

The telephone number for the receptionist is (703) 308-0661.

  
Ellis Robinson  
Supervisory Patent Examiner  
Technology Center 1700